Middle Fork Coquille 2007 Commercial Thinning and Density Management Environmental Assessment

Burma Triangle Commercial Thinning
Decision Document

Bureau of Land Management
South River Field Office, Roseburg District Office
EA # OR-105-07-04

Decision:

It is my decision to authorize the Burma Triangle Commercial Thinning project, continuing implementation of Alternative Two described in the Middle Fork Coquille 2007 Commercial Thinning and Density Management EA (pp. 5-14).

Ten units will be thinned, totaling 273 acres. The units are located in Sections 29 and 33, T. 29 S., R. 8 W.; Section 35 of T. 29 S., R. 9 W.; and Section 3 of T. 30 S., R. 9 W., W.M. Unit numbers and corresponding designation in the EA are as follows: Unit 1 (29-8-29A), Unit 2 (29-8-29B), Unit 3 (29-8-33A), Unit 4 (29-8-33B), Unit 5 (29-8-33C), Unit 6 (29-8-33D), Unit 7 (29-9-35A), Unit 8 (29-9-35B), Unit 9 (30-9-3A), and Unit 10 (30-9-3B).

Approximately 62 acres to be treated are allocated as Riparian Reserve. All remaining acres are allocated as General Forest Management Area. As described in the EA (p. 25), Unit 6 will be managed as unmapped Late-Successional Reserve, however, because of an occupied marbled murrelet site approximately 0.15 miles east of the unit, and detection of murrelet activity approximately 0.10 miles west of the unit.

The Burma Triangle Commercial Thinning project will yield an estimated 3,725 thousand board feet of timber. Thinning in the General Forest Management Area will generate 1,977 thousand board feet chargeable to the Roseburg District annual allowable sale quantity. The remaining 1,748 thousand board feet derived from density management in Riparian Reserves and Unit 6 is not chargeable against the annual allowable sale quantity.

Access will be primarily provided by existing roads supplemented by: extension of four roads and construction of three permanent surfaced spur roads, approximately 0.73 miles in total length; and construction of two temporary spur roads, approximately 0.18 miles in total length. As described in the EA (p. 11), the intent is to decommission temporary spur roads in the same operating season in which they are constructed and used. Approximately 0.47 miles of existing roads will be renovated, to include additional surfacing and installation of six additional cross-drain culverts.

Approximately 4 acres, principally within unit boundaries, will be cleared for road rights-of-way. Twenty-three trees 20 inches or larger diameter breast height will be cut, the largest an incense-cedar 32 inches diameter breast height.

As described in the EA (p. 12), felling and yarding of timber, other than for clearing road rights-of-way, is seasonally restricted from April 15 to July 15 during the bark slip period.

Commercial thinning and density management will be accomplished utilizing a combination of ground-based and cable-yarding equipment, as described in the EA (p. 11).

Ground-based equipment will operate on pre-designated skid trails on slopes generally less than 35 percent, using existing skid trails to the greatest degree practical. Primary skid trails, including those already existing, and landings will collectively affect no more than 10 percent of the ground-based harvest area. Ground-based yarding will be seasonally restricted to the dry season, typically between mid-May and mid-October, as well as subject to bark slip restrictions.

Cable-yarding equipment will be capable of maintaining a minimum of one-end log suspension to reduce soil compaction and displacement, and have a minimum of 100 feet of lateral-yarding capability to minimize the number of corridors and landings required. Any cable yarded areas accessed by unsurfaced roads will also be subject to dry season operational restrictions.

Rationale for the Decision:

The Middle Fork Coquille 2007 Commercial Thinning and Density Management EA analyzed two alternatives in detail, Alternative One - No Action (EA, p. 5), and Alternative Two - The Proposed Action (EA, pp. 5-14). Alternative Two will achieve objectives enumerated in the EA for commercial thinning (p. 3), whereas Alternative One will not. The EA (pp. 14-16) also considered two additional alternatives but did not analyze them in detail, as one was not considered economically reasonable and viable, and the second was already addressed by the proposed action alternative.

Survey and Manage

On July 25, 2007, the *Record of Decision to Remove the Survey and Manage Mitigation Measure Standards and Guidelines from Bureau of Land Management Resource Management Plans Within the Range of the Northern Spotted Owl* was signed by the Assistant Secretary, U.S. Department of the Interior, amending BLM resource management plans for the western Oregon districts and eliminating provisions of the Survey and Manage program set forth in the *Record of Decision for Amendments* (ROD) *to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl*

Public Comments

Comments on the completed EA were received from four organizations. These comments did not provide any new information or identify any relevant issues the BLM should have considered in the analysis, or did not pertain to the project being analyzed. A selection of the comments is addressed below.

> "We wish that you would use variable density thinning prescriptions in all young stand thinning projects regardless of land allocation. Uniform spacing basically sets up the need for future thinning that the agency may not have sufficient funding, capacity, and public support to accomplish."

For density management in Riparian Reserves and in Late-Successional Reserves, variable density thinning is appropriate. In the General Forest Management Area, however, the objective is to maximize timber production which requires maintaining stands at full stocking levels. The mission of the BLM is to manage those O&C lands allocated as commercial forest land for permanent, sustainable timber production, and funding is not considered an issue.

> "For the entire project in LSRs and RRs, the silvicultural prescription should retain all minor species to help restore the original diversity. Disease resistant Port Orford Cedar and Sugar Pine should also be planted in created gaps."

Consideration for minor conifer species has been made with preference given to minor species in the marking guidelines. Pines, western redcedar, and incense-cedar are given preference over Douglas-fir. Grand fir is discriminated against due to its susceptibility to the fir engraver. In the Riparian Reserves, cedars greater than eight inches diameter breast height are marked for retention and do not count toward the prescribed basal area. An exception would be Port-Orford-cedar trees located adjacent to roads which would be removed as a measure to reduce the risk of further spread of *Phytophthora lateralis* root disease. Large hardwoods are marked for retention. Sugar pine, if present, has been reserved and does not constitute any of the offered timber volume.

> "Hardwood trees in particular, such as maple, yew, and some alder, contribute to the diversity of the LSR, especially when they occur in riparian areas. The EA states that "Density management in Riparian Reserves would aid in the retention of hardwoods as stand components". However, it does not say it will protect all important, large hardwoods, especially yew trees."

The stands being treated are 41 to 58 years old, and large hardwood trees are not numerous. It is not practical from an operational standpoint to reserve all hardwoods. A minimum size of ten inches diameter breast height for retention was selected as it represents a size at which the likelihood of survival during thinning operations was considered reasonable.

Pacific yew is a conifer species, not a hardwood. It has no present commercial value to timber purchasers and timber companies and hence no incentive to cut yew trees. Cutting yew trees is limited to those instances of operational necessity. Regardless, all yew trees are reserved by timber sale contract stipulations and are only cut where approved.

> "The EA states that "In Riparian Reserves, untreated areas could be used to afford protection" to snags. The word "would", not "could" is more protective. The EA should be clear that untreated areas would be created around significant snags. Instead, it sounds like only snags that just happen to be in untreated areas might, or might not, be protected."

The EA stated that untreated areas could be used to protect snags. The location of unthinned areas would be determined by the presence of important habitat features such as snags. To state that untreated areas "would" be used implies absolute protection of all snags, a commitment that cannot be made when safety and stand density objectives are taken into consideration.

The complete text of the discussion in the EA (p. 9) states that in Matrix stands, snags would be protected where feasible and possible, by designation of rub trees. This does not preclude use of rub trees for protection of snags in Riparian Reserves or in Late-Successional Reserves. The marking prescription in Riparian Reserves and the unit to be managed as an unmapped Late-Successional Reserve in the Burma Triangle Commercial Thinning project designates snags greater than 16 inches diameter breast height and at least16 feet tall for retention along with the first ring of live trees to act as rub trees.

> "Our comments have always asked the BLM to keep the largest of the trees that would otherwise needs [sic] to be cut, for created snags."

As discussed in the EA (pp. 6, 7 and 16), the largest trees consisting of the dominant, co-dominant and remnant old-growth trees are not the focus of thinning and will generally be reserved from cutting, subject to the exceptions noted. These exceptions include clearing of road rights-of-way; clearing landing areas; and removal of trees necessary to address operational safety concerns subject to Oregon State laws and regulations.

> "Once the EA mentions that a right-of-way is 20 to 25 feet. Is this the cutting width?"

In addition to the width of the running surface of temporary roads, which may be 12 or 14 feet, a lateral clearing of at least five feet either side of the road is required, along with a minimum of ten feet of overhead clearance. This means that all encroaching vegetation will need to be cleared within these limits. Whether or not this requires a 25-foot "cutting width" depends on the size, type, and spacing of vegetation astride the rights-of-way. Road width may also vary if turnouts are needed or greater line-of-sight is required approaching a curve in the road.

> "The EA assures us that "Circumstances under which older remnant trees could be cut would be typically limited to: clearing of road rights-of-way; clearing landing areas; and removing the trees to address operation [sic] safety concerns . . ."
>
> This is inadequate assurance that remnant trees will be protected. The use of the words "typically" allows anything within few sideboards. Also the BLM has offered no mitigations for old, large trees that could be in the road right-of-way. For instance, the BLM could offer to try moving the road, or going around the tree, or putting a landing in a different place. The BLM could at least *try* not to cut down any big trees left in the LSR.
>
> Before the decision is made, the BLM will KNOW how many older or larger trees are being cut down for operational purposes. The BLM should disclose this information in the decision documents."

As previously stated, only 23 trees 20 inches or greater in diameter breast height will be cut for rights-of-way clearing. The BLM attempts to avoid the need to cut large remnant trees, in exactly the manner suggested, because these are not the focus of commercial thinning and density management.

We are only able to determine the need to cut large trees in rights-of-way. We do not specify landing locations and yarding corridors as the logging contractor has a much better idea of where they will need to be located for the safest and most efficient operations.

> "The EA says that "The Oregon Coast Coho salmon was proposed for relisting but found not to warrant listing…" A recent court ruling found fault with that decision. The decision document should update the public record with the new information."

The BLM is aware of the court ruling directing the National Marine Fisheries Service to reconsider listing of the Oregon Coast coho salmon, and the subsequent announcement on re-listing of the coho salmon on February 4, 2008. Both of these decisions are a matter of public record and do not serve to change the analysis of the Middle Fork Coquille 2007 Commercial Thinning and Density Management EA as effects to coho salmon and Essential Fish Habitat are not at issue.

As described in the EA (p. 31), a waterfall approximately 0.8 miles below the confluence of Twelvemile Creek and the Middle Fork Coquille River is a barrier to migration by coho salmon, and marks the extent of Essential Fish Habitat. This is over two miles distance from any thinning and density management units discussed in the EA. The EA (pp. 62-66) documents that no adverse effects to aquatic habitat and fish, including coho salmon, and water resources (pp. 68-70) will occur.

Port-Orford-cedar and Phytopthera lateralis

Healthy, uninfected Port-Orford-cedar is present in Units 3 and 9. The most vigorous trees have been marked for retention. No Port-Orford-cedar has been noted along the haul roads, but the presence of saplings along Signal Tree Road is considered probable despite a previous sanitation cut in the late 1990s.

As described in the EA (p. 54), the *Record of Decision and Resource Management Plan Amendment for Management of Port-Orford-cedar in Southwest Oregon, Coos Bay, Medford, and Roseburg Districts* provides direction for assessing risk and controlling spread of Port-Orford-cedar root disease in order to maintain Port-Orford-cedar as an integral component of the vegetative communities of which it is a part. The risk key is used for site-specific analysis to assess the need for application of additional management practices. An assessment of the project area indicates no special mitigation is required, because:

- There are no uninfected Port-Orford-cedar within, near or downstream of any of the proposed commercial thinning and density management units or anticipated haul routes whose ecological, Tribal, or product use or function measurably contributes to meeting resource management objectives;

- There are no uninfected Port-Orford-cedar within, near or downstream of any of the proposed commercial thinning and density management units or anticipated haul routes that, were they to become infected, would likely spread infections to trees whose ecological, Tribal, or product use or function measurably contribute to meeting land and resource management plan objectives; and

- None of the proposed commercial thinning and density management areas are located within uninfested 7th-field watersheds (drainages).

As further addressed in the EA (p. 55), although no additional mitigation is indicated, measures to reduce the risk of further spread of Port-Orford-cedar root disease will be implemented. These will include: equipment washing; restricting road construction and renovation to the dry season; restricting hauling on unsurfaced roads to the dry season; and decommissioning and blocking unsurfaced roads upon completion of commercial thinning and density management operations.

Wildlife

As illustrated in Figure B-3, Appendix B of the EA, the eastern third of Unit 4 of the Burma Triangle Commercial Thinning project is overlapped by the outer edge of the Berry Creek **northern spotted owl** home range. Units 5 and 6 of the Burma Triangle Commercial Thinning project are located wholly within the perimeter of the Bear Naked home range, though both units are more than a mile distance from the activity center. Units 3, 4, 5 and 6 are located within Critical Habitat Unit OR-62, designated by the U.S. Fish and Wildlife Service for the survival and recovery of the spotted owl.

As described in the EA (p. 57), no effect to spotted owls from noise disruption is expected, as thinning operations will occur outside of the disruption threshold for known spotted owl sites or activity centers, or be seasonally restricted from March 1st to June 30th if within the disruption threshold of unsurveyed suitable spotted owl habitat. Seasonal restrictions could be waived if surveys indicate that spotted owls are not present, not nesting, or failed in nesting. This will ensure that noise disruption will not cause spotted owls to abandon nests or fledge prematurely.

As further described in the EA (p. 57), commercial thinning and density management are not expected to negatively affect Critical Habitat because habitat availability and connectivity in CHU OR-62 would continue to provide for the survival and recovery of spotted owls.

As discussed in the EA (p. 58), commercial thinning is not expected to affect individual spotted owls or reduce the ability of the affected home ranges to support spotted owls because:

- High-quality nesting, roosting and foraging habitat would not be affected;
- Affected dispersal-only habitat in proposed units would retain functionality because canopy closure would remain above 40 percent;
- Existing coarse woody debris and snags would be reserved to the extent possible and continue to provide habitat for spotted owl prey species; and
- The amount and distribution of untreated dispersal-only habitat in affected home ranges would be sufficient to allow spotted owls to access nesting, roosting and foraging habitat.

The U.S. Fish and Wildlife Service concurred with a not likely to adversely affect determination pursuant to section 7 of the Endangered Species Act of 1973 (Ref. # 1-15-05-I-0511).

None of the units comprising the Burma Triangle Commercial Thinning project are located in Critical Habitat designated by the U.S. Fish and Wildlife Service for the survival and recovery of the **marbled murrelet**.

As illustrated in Table 3-4 of the EA (p. 26), suitable nesting habitat for the marbled murrelet is present in Unit 6 and adjacent to all of the remaining units except for Units 1 and 9.

All of the units are located within Habitat Zone 2, and all are within the Restriction Corridor except for Unit 2. Suitable habitat adjacent to units has not been surveyed, with the exception of Unit 6 where occupancy and activity has been documented in close proximity. Consequently, operations on these units, excepting Units 1 and 9, will be subject to seasonal restriction from April 1 to August 15, followed by Daily Operational Restrictions described in the EA (p. 13) between August 6 and September 15.

The U.S. Fish and Wildlife Service concurred with a not likely to adversely affect determination pursuant to section 7 of the Endangered Species Act of 1973 (Ref. # 1-15-05-I-0511).

Four Bureau Sensitive mollusk species were identified in the EA (p. 27) as possible occupants of the project watershed. In the Burma Triangle Commercial Thinning project area only the **green sideband, Oregon shoulderband snails** and **spotted taildropper** were suspected based on habitat conditions. Protocol surveys of the units were conducted for the three mollusk species with negative results.

Botany

The Burma Triangle Commercial Thinning project units were surveyed for Special Status vascular plant, lichen and bryophyte species identified in the EA (p. 36 and Appendix C). The results of these surveys were negative. Consequently, no effects to any Special Status vascular plant, lichen or bryophyte species are expected.

As described in the EA (p. 37), there are no known Special Status fungi species in the Burma Triangle Commercial Thinning project area that will be affected. As further discussed in the EA (pp. 37 and 74), surveys for Bureau Sensitive fungi species are not considered practical, so the presence of any of these species in the project area is unknown. If fungi are present in the proposed commercial thinning and density management units, loss of the sites could result as a consequence of the removal of substrate and modification of microclimate.

Aquatic Habitat, Fish, and Essential Fish Habitat

As described in the EA (pp. 62-63), the Burma Triangle Commercial Thinning project is not expected to have any effects on stream substrate and sediment. "No harvest" buffers at least 20 feet in width were established on all streams. Equipment operations will be prohibited within these buffers so that soils are not displaced or compacted. Non-compacted forest soils in the Pacific Northwest have very high infiltration capacities and are not effective in transporting sediment by rain splash or sheet erosion.

Any potential sediment resulting from thinning operations will be intercepted by the vegetated "no-harvest" buffers and precipitate out rather than reach stream channels. These buffers will provide root strength sufficient to protect bank stability and prevent abnormal bank erosion that would contribute additional sediment to streams where it could accumulate and become embedded in streambed gravels. No effects from sediment associated with road construction, renovation, use and decommissioning are expected either.

It is acknowledged in the EA (p. 63) that thinning will remove trees within a half site-potential tree height (80 feet) of streams which could result in a short-term reduction in available wood. This smaller diameter wood does not persist for long due to higher decay rates, however, and is more easily flushed from the system than large pieces. Current down wood will be reserved to provide for the short term, while density management will accelerate the growth of large diameter trees to provide long-term sources of large wood for in-stream habitat.

The availability of pool habitat will be unaffected by either commercial thinning or road construction as no existing large wood will be removed from streams. As described in the EA (p. 64), access to spawning and rearing habitat will be unaffected because road construction will be located on or near ridge tops, and will not involve construction or replacement of crossings that may act as barriers to fish passage.

As discussed in the EA (p. 65), direct effects to fish species from the harvest and hauling of timber could result from deposition of additional fine sediment and a temporary increase in turbidity. Density management is not expected to result in fine sediment reaching streams, however, because "no-harvest" buffers will filter out sediment from run-off. The potential for sediment effects generated by road related activities is so small that it will not be measurable at the project scale, nor have a cumulative effect at the fifth-field watershed scale.

For the aforementioned reasons it is not anticipated that the Burma Triangle Commercial Thinning project will not have any adverse effect on Essential Fish Habitat located more than two miles downstream of the project area.

Water Quality

No measurable change in stream flows is expected in association with the Burma Triangle Commercial Thinning project because it involves only partial removal of vegetation on an area constituting only one-quarter of one percent of the total area of the Upper Middle Fork Coquille Watershed Analysis Unit. The project area is located below the Transient Snow Zone in the rain-dominated zone, so no peak flow effects associated with timber harvest and warm rain-on-snow events are expected.

The risk of new road construction influencing flows is also low. As described in the EA (p. 69), proposed road construction and reconstruction associated with the Middle Fork Coquille 2007 Commercial Thinning and Density Management Plan would consist of less than three miles in the Headwaters Middle Fork Coquille subwatershed and less than half a mile in the Twelve Mile Creek subwatershed. Road construction authorized by this decision totals 0.95 miles, of which only 0.73 miles is permanent.

All new road construction is sited on or near stable ridge tops and away from streams. Roads will be out-sloped to the greatest degree practical. Where out-sloping is not practical because of grade, roads will be in-sloped and drain dips installed to assure flow is dispersed onto adjoining slopes rather than concentrated in the drainage network. Consequently, the roads will be disconnected from the drainage network and have no potential for affecting peak stream flows.

As discussed in the EA, (p. 70), "no harvest" buffers would prevent disturbance to stream channels and stream banks and would intercept surface run-off allowing for deposition of any sediment transported by overland flow before it reached active waterways.

As described in the EA (p. 63), to mitigate the potential for sediment delivery from road surfaces along the haul route, ditch lines would be left vegetated where possible to help filter sediment from road runoff, and water bars or drain dips would be installed where indicated to further route water off of the road surface and onto the forest floor. As described in the EA (p. 69), new roads would not be connected to the drainage network. Since road segments must be connected directly to stream channels in order to deliver sediment-laden water, these roads would have no effect on stream sediment.

As described in the EA (p. 70), variable width "no-harvest buffers" will conserve the vegetation that provides primary shade for stream channels. Consequently, stream shading will not be affected by density management and it is unlikely that stream temperatures will be affected in localized reaches, or cumulatively at the watershed scale.

Aquatic Conservation Strategy

Riparian Reserves have been designated on all perennial and intermittent streams in the Burma Triangle Commercial Thinning project area. Applicable management direction is being applied, that includes: avoiding location of new roads and landings in riparian areas; minimizing disruption of natural hydrologic flow paths, including diversion of stream flow and interception of surface and subsurface flow; minimizing sediment delivery from roads; and maintaining fish passage at all road crossings.

The Burma Triangle Commercial Thinning project is not located in a **Key Watershed**, so there is no additional management direction that applies.

As addressed in the Middle Fork Coquille 2007 Commercial Thinning and Density Management EA (pp. 1, 18, 19, and Appendix D) recommendations and information from **Watershed Analysis** were considered and incorporated into the analysis of effects. Additional information from Aquatic Habitat Inventory surveys conducted by the Oregon Department of Fish and Wildlife was used, in conjunction with site-specific evaluations, in describing aquatic conditions throughout the watershed.

As described in this decision, density management will be applied to 62 acres of Riparian Reserves to help restore species and structural diversity. Consequently, the project is considered to be a **Watershed Restoration** project, the only ACS component that is an action, compared with the other objectives which are location-based or process-based.

In consideration of these facts, and the analysis contained in the Middle Fork Coquille 2007 Commercial Thinning and Density Management EA, it is my conclusion that the Burma Triangle Commercial Thinning project is consistent with the intent and direction for the Aquatic Conservation Strategy set forth in the 1994 *Record of Decision for Amendments* (ROD) *to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl*, and the 1995 Roseburg District *Record of Decision and Resource Management Plan.*

Cultural/Historical Resources

Pedestrian surveys were conducted consistent with Oregon BLM/SHPO Cultural Resource Protocol. No cultural resources were identified and the Burma Triangle Commercial Thinning project will have no effect on cultural and historical resources.

Noxious Weeds

All logging equipment, excluding log trucks and crew transport, will be pressure washed or steam cleaned prior to mobilization in and out of the project area to minimize the risk of introducing soil from outside the project area that may be contaminated with noxious weed seed or other propagative materials. Any equipment removed during the life of the contract must be cleaned before being returned to the project area.

Monitoring:

Monitoring of the effects of the proposed action, if implemented, would be done in accordance with provisions contained in the ROD/RMP, Appendix I (p. 84, 190, 193, & 195-199), and would focus on the following resources: Matrix, Water and Soils; Wildlife Habitat; Fish Habitat; and Special Status Species Habitat.

Protest Procedures:

As outlined in 43 CFR § 5003 – Administrative Remedies at § 5003.3 (a), protests may be filed within 15 days of the publication date of the timber sale notice. Publication of such notice on May 27, 2008, in *The News-Review*, Roseburg, Oregon, constitutes the decision date from which such protests may be filed. Protests shall be filed with the authorized officer and contain a written statement of reasons for protesting the decision.

43 CFR 5003.3 (b) states that: "Protests shall be filed with the authorized officer and shall contain a written statement of reasons for protesting the decision." This precludes the acceptance of electronic mail or facsimile protests. Only written and signed hard copies of protests that are delivered to the Roseburg District Office will be accepted.

As set forth in 43 CFR 5003.3 (c), protests received more than 15 days after the publication of the timber sale notice are not timely filed and shall not be considered.

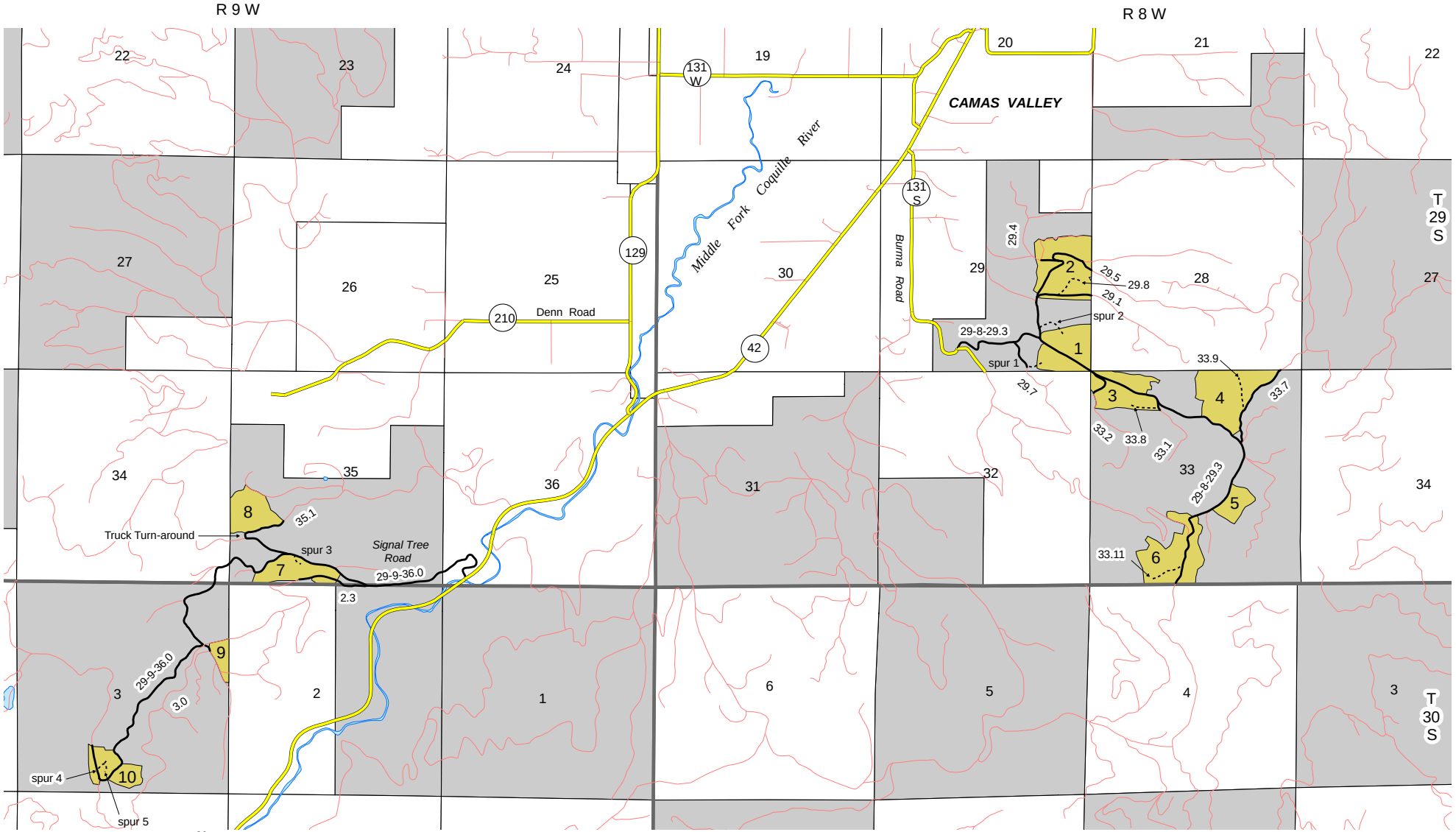
_____ _____

Ralph Thomas
Field Manager
South River Field Office

Date

BURMA TRIANGLE

Commercial Thinning



T29,30S, R8,9W

Willamette Meridian, Douglas Co., OR

4-23-2008

County Road
Existing Road
Haul Route
Road to be Constructed

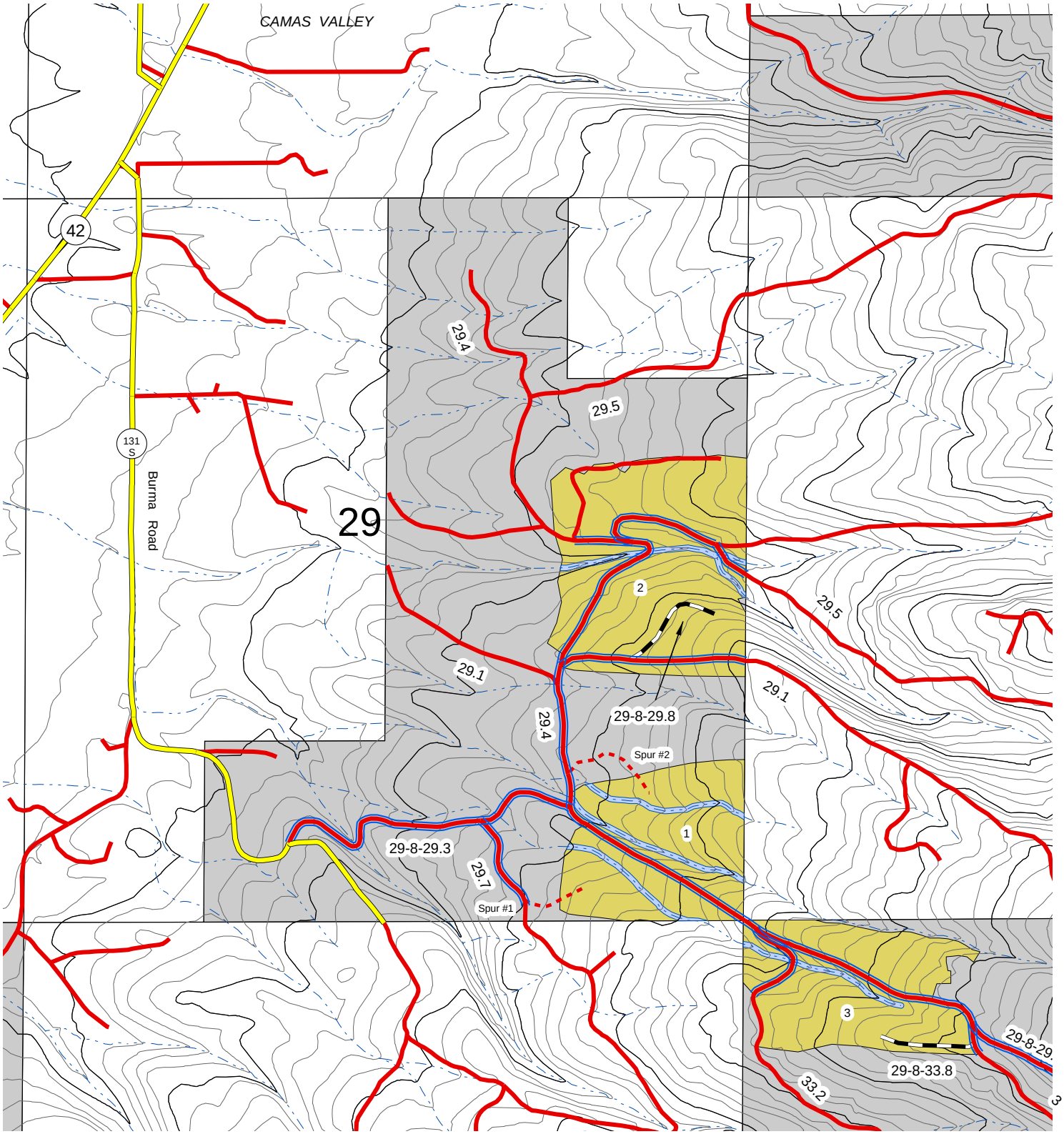
Thinning Area
BLM (O&C) Land
Non-BLM Land

'Middle Fork Coquille 2007
Density Management\Commercial Thinning EA'

'Final Decision' Document

BURMA TRIANGLE

Commercial Thinning



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T29S, R8W

Willamette Meridian, Douglas Co., OR

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- Paved Highway
- Haul/Access Route
- Existing Road
- Construct Spur, Decommission
- Construct Spur, Rock
- Stream
- 100' Contour
- 20' Contour
- Thinning Area
- No-Harvest Riparian Buffer
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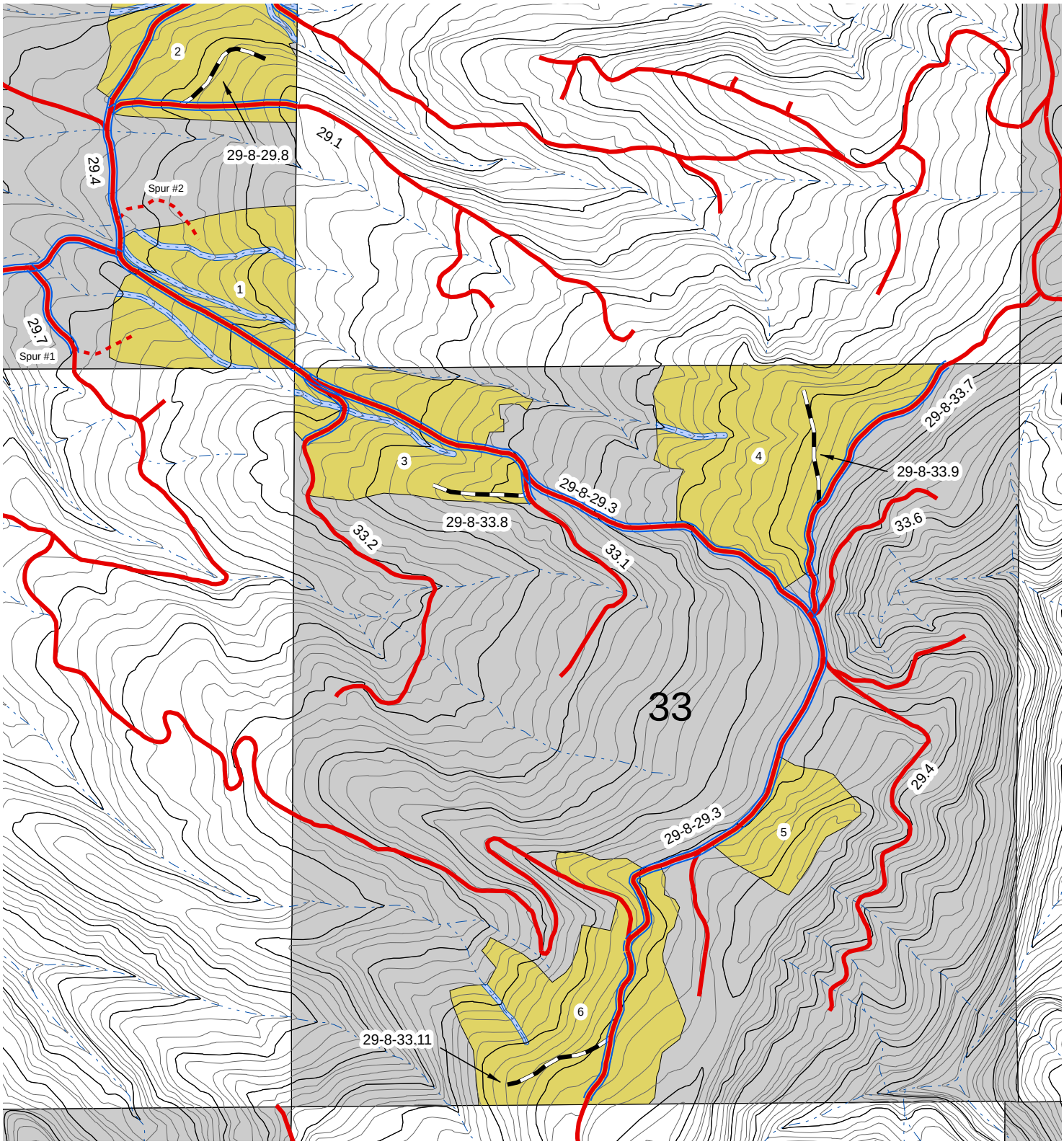

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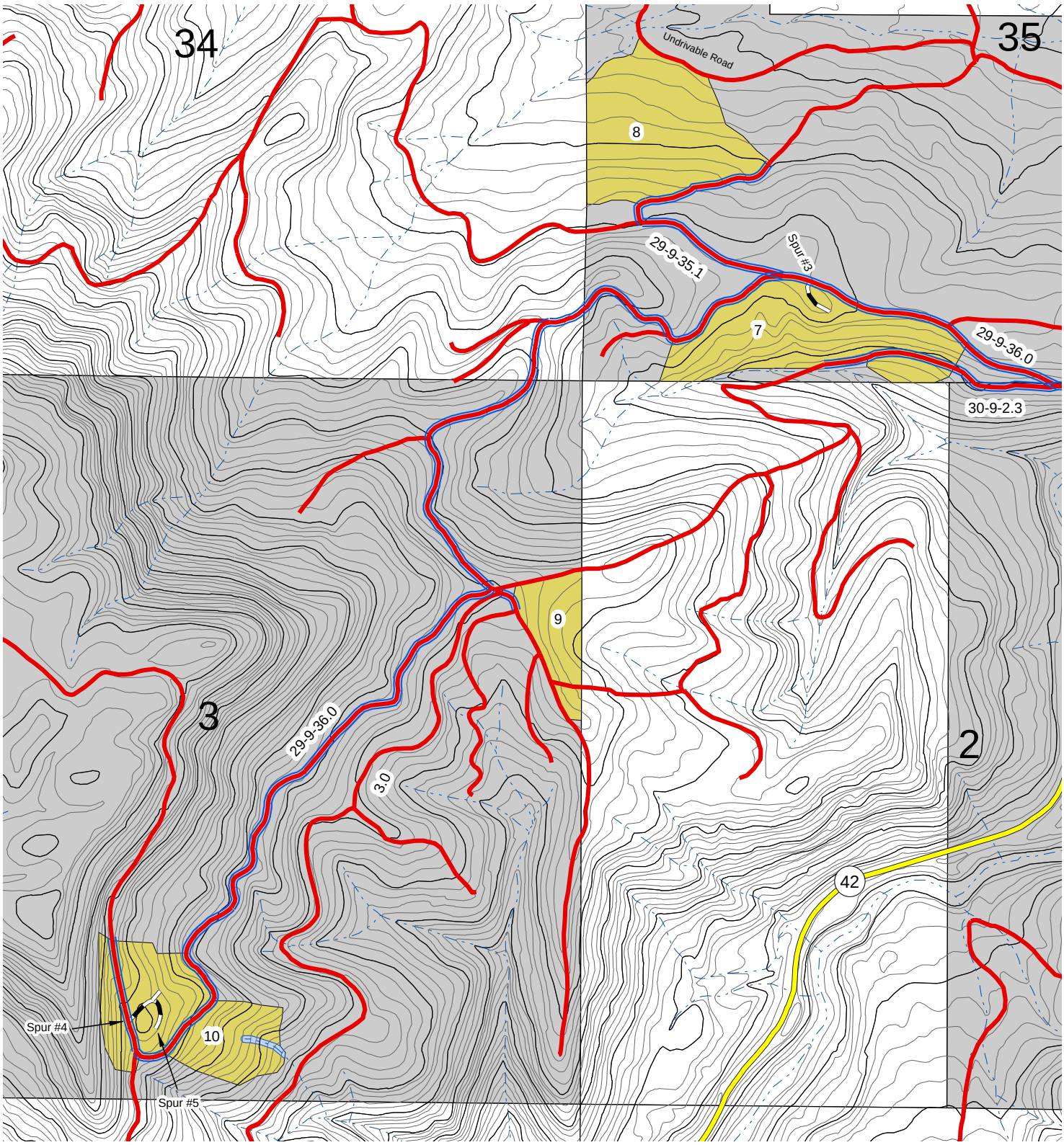

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T29,30S, R9W

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